

# OWNER'S MANUAL



**VALMET HUNTER M/88  
SEMI-AUTOMATIC HUNTING RIFLE**

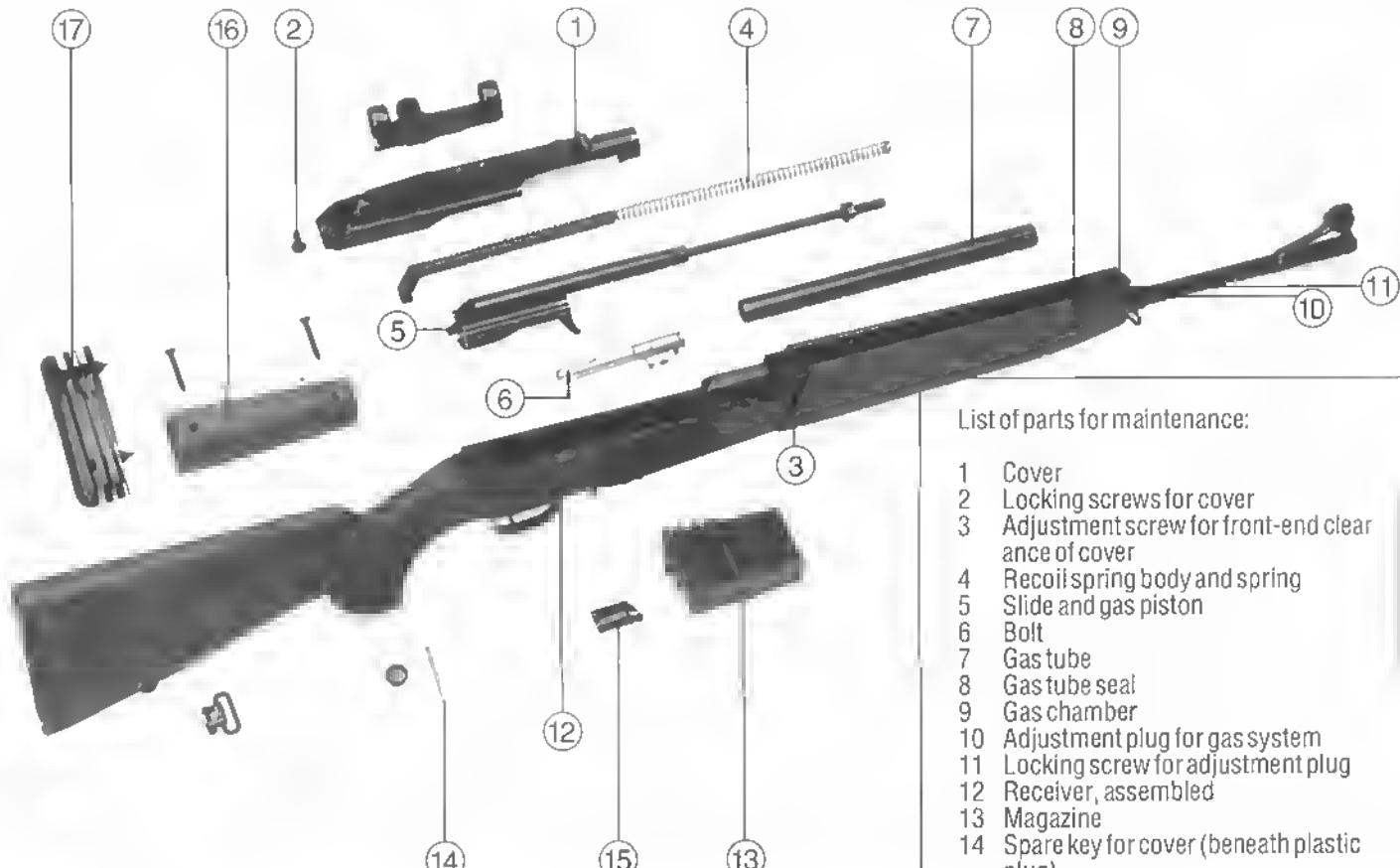
**VALMET**

Congratulations on choosing the Valmet Hunter m/88 as your new semi-automatic hunting rifle.

The rifle is based on a famous gas-operated rifle which was designed on the 1940s. The legendary reputation of this weapon for reliability and durability is your guarantee of faultless operation under all conditions. As manufacturer of hundreds of thousands of this kind of weapons we have taken advantage of the opportunity to develop the original design and make it even more suitable for hunting and target shooting.



In order to get the most out of your rifle, read through the following operating and maintenance instructions and observe them carefully. If, in addition to normal servicing, your require advice or spare parts, please get in contact with your dealer or importer.



List of parts for maintenance:

- 1 Cover
- 2 Locking screws for cover
- 3 Adjustment screw for front-end clearance of cover
- 4 Recoil spring body and spring
- 5 Slide and gas piston
- 6 Bolt
- 7 Gas tube
- 8 Gas tube seal
- 9 Gas chamber
- 10 Adjustment plug for gas system
- 11 Locking screw for adjustment plug
- 12 Receiver, assembled
- 13 Magazine
- 14 Spare key for cover (beneath plastic plug)
- 15 Buffer
- 16 Cheek piece (optional)
- 17 Distance and angle pieces (optional)

Cleaning kit including to each rifle

# 1 Design and operation

The Valmet Hunter m/88 is a gas-operated semi-automatic rifle. The rifle is cocked by hand for the first shot and on firing the spent cartridge is ejected and a new round fed into the chamber, rendering the weapon immediately ready for the next shot. Be careful, since the safety button is now in "OFF" position.

## 2 Operation of the safety button

The safety button, marked with the letter S, is located transversely in the receiver above the trigger. By pressing this pin from right to left (seen from behind) the safety button moves roughly 3 mm and locks into the "OFF" position. At the same time a red warning symbol

appears on the left side of the gun. The rifle can only be cocked in this position (slide cannot be pulled back when the safety button is in the "ON" position). The safety button is engaged by pressing the pin from left to right. In use, the simplest way to disengage the safety button is by using one's forefinger, without letting go of the neck of the weapon (right-handed). The operation of the safety button is virtually silent. The safety button may be disengaged totally noiselessly by applying gentle thumb support on the opposite side of the weapon while the button is being pressed.

Having loaded the rifle, remember to return the safety button to the "ON" position and do not release it until just before firing.



## 3 Sights

A

The rear sight has two positions. The wide U-shaped notch is designed for rapid action hunting situations. When this position is selected the point of aim is approximately 20 cm/100 m (8'/110 yd.) lower than by using a narrow sight blade.

B

The front sight is a bead hinged at its front edge to permit vertical adjustment and held in position at its rear edge by a side screw (screw 1). By loosening off screw 1 the sight may be raised or lowered. Raising the sight 1 mm depresses the point of aim by roughly 20 cm over a distance of 100 m. Sideways adjustment can be carried out using screws 2 and 3. By loosening the left hand screw (seen from behind) and tightening the right hand screw



the bead moves to the left and the point of aim on the target to the right (1 mm = approx. 20 cm/100 m, 1/32" = approx. 8"/110 yd.).

The sights are set at the factory for a range of 100 metres using Sako cartridges and 11.7 g (180 grs) softpoint bullets. The sights should always be reset after every change of cartridge or shooter.

C

A dove-tail truck on the cover permits attachment of a mount and scope. If an original scope mount (optional) is used, the point of aim remains the same even if the scope is now and then removed. The truck is equipped with two notches into which the flange of the scope mount fits. Use whichever of these offers the best distance between eye and scope. To make sure the point of aim remains exactly the same, always use the same notch.

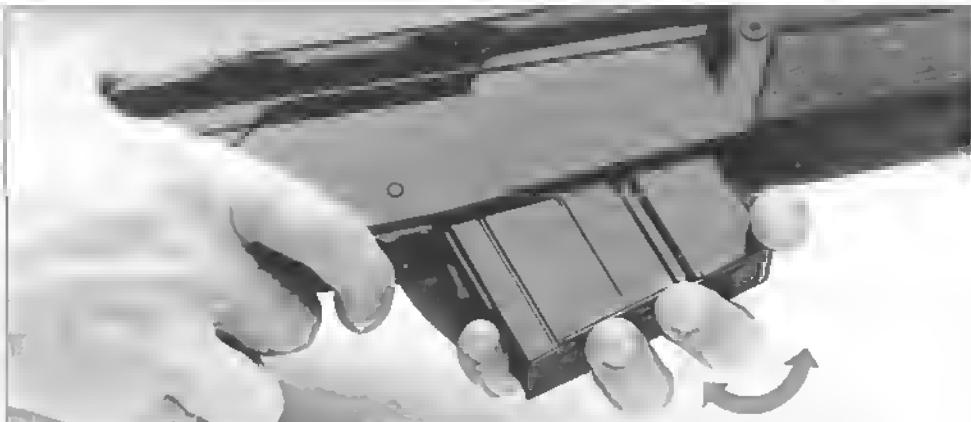
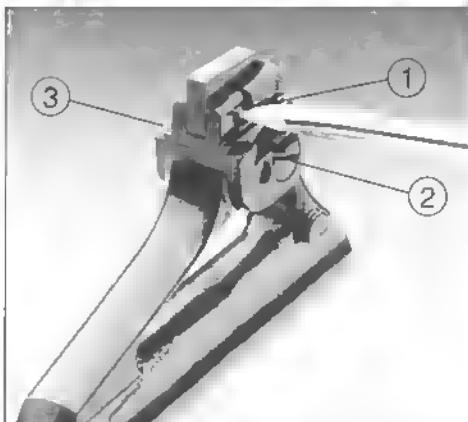
## 4 Loading

The barrel of your new rifle has been treated at the factory with high-quality protective oil. Please remove all traces of oil before using the rifle for the first time.

Before positioning the magazine make sure that the safety button is in the "ON" position. Fit the magazine so that the cam on the front edge drops into place first, then swivel the rear end of the magazine into place. A distinct click should be heard, and the magazine is then securely positioned. Disengage the safety button by pressing it to the left. Cock the weapon by pulling the slide into the fully-back position and releasing it under the force of the spring. Do not impede this forward movement in any way or the weapon may not feed correctly.

The rifle is now loaded and the safety button is in the "OFF" position. If you are not going to fire immediately, re-engage the safety button.

To remove the magazine, first pull the locking button back, turn the rear end of the magazine out, then pull the whole magazine away. After removing the magazine always check that the cartridge chamber is empty.



## 5 Locking the slide back

For target shooting and cleaning purposes the slide can be locked in the halfway-back position. First remove the magazine. Pull the slide back and press in the locking button located just in front of the trigger guard (see picture). Keep the button depressed and carefully allow the slide to move forward until it stops. Never allow the slide to strike against the locking pin under full pressure of the spring. An occasional blow will not damage the locking mechanism, but it is not designed to withstand continuous abuse. In this position the slide and bolt prevent cartridges being fed into the chamber even if the magazine is now reattached. The slide can be freed by pulling it back slightly.

## 6 Adjusting the gas system

Two screws can be found on the right side of the gas chamber (see the picture beside), a locking screw (upper) and an adjustment plug (lower). By removing the locking screw the plug can be turned roughly  $90^{\circ}$  in an anticlockwise direction so that the locking screw now locates into a second recess in the plug. In this position the gas system is shut off and the rifle can be used as a hand-cocked single-shot weapon. This enables participation in competitions in which the use of semi-automatic weapons is not allowed.



The hole in the plug is dimensioned so that the rifle operates perfectly using factory-made cartridges with bullet weights of 10-14 g (150-210 grs). If you make up your own cartridges or use factory-made cartridges with a lighter bullet weight, ask your dealer for a substitute gas plug (optional).



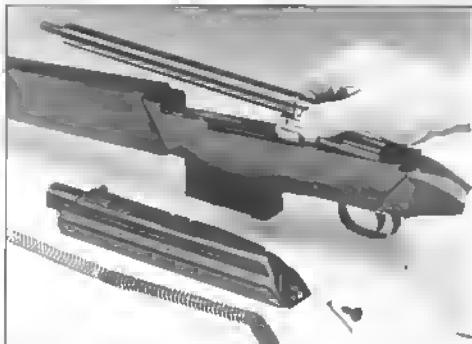
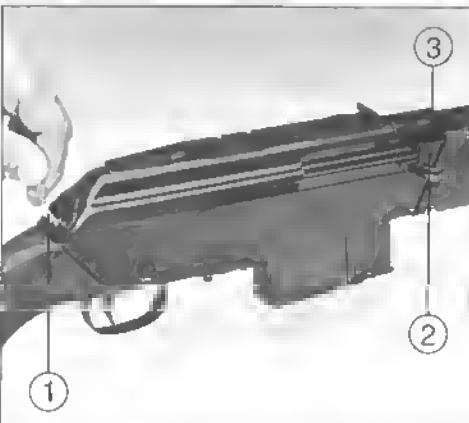
If you intend to load your own cartridges make absolutely sure that you are using the correct charge and type of powder. Sako-Valmet Ltd. do not accept any liability for damage caused by handloaded ammunition.

## 7 Disassembly

The cover is fastened to the receiver at the front by means of a dove-tail joint and at the rear by a hex screw. The cover has been designed as an integral part of the sight (scope/rear sight) attachment system and for this reason it has been adjusted at the factory by means of screw 2 (see picture) to have zero clearance. Consequently when removing the cover, after removing screw 1, the cover must be pulled straight back. In no circumstances should it be pushed to one side, or the rear end lifted up. If for some reason the cover does not readily slide back the 5 mm necessary for removal, tap the cover lightly backwards using the handle of a screwdriver or piece of wood at the point marked 3. This extremely secure attachment means that the cover cannot become loose during firing and also that when reattached it returns to exactly the same position thus

ensuring the point of aim remains unchanged. If necessary, the clearance can be adjusted by means of screw 2.

Having removed the cover, the recoil spring body and spring should be pushed forward, freeing it from its recess. This can now be removed to the rear. Now remove the slide and bolt assembly by pulling it into the rear position and lifting it up. The gas tube can now be removed easily. The bolt is detached from the slide by rotating it a quarter turn in a clockwise direction (seen from behind) and simultaneously pushing it backwards. Having freed it from its guide the bolt can be removed in a forward direction from the slide.



## 8 Cleaning

The disassembled parts can now be cleaned easily. Remove all dirt, remains of gun powder and old oil from the mechanism. Treat the mechanism with good quality gun oil. If the rifle is fired a great deal for example when target shooting, then the use of a motor cycle chain oil - which contains a molybdenum sulphide additive - is highly recommended for the bolt and slide. Oil of this kind can be obtained in aerosol cans. However we do not recommend this for cold weather use, and in temperatures below - 20°C all forms of lubrication, including gun oil, should be removed from the mechanism.

Check that the firing pin and extractor move freely (both are spring loaded). The hammer should only be treated with extremely thin oil.

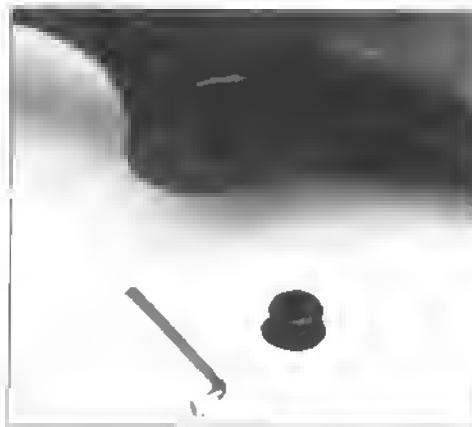
Cleaning the barrel each time the rifle is used or gets damp will extend the life of the weapon significantly. Even good quality gun oil should be removed before shooting. To prevent water or dirt getting into the rifle when hunting a black target patch can be put over the end of the barrel. This can even be fired through without adverse effects.

Please note: Never release the trigger of a disassembled rifle because the hammer may damage the ejector cam.

## 9 Assembly

Place the bolt into the slide, following the instructions for disassembly in reverse order. Make sure that the bolt is in the torward position. Slip the gas tube over the piston and position the assembly with the slide in the back position.

Push the gas tube into place and check that the front end locates with the gas chamber guide (see picture) and that the flat face at the rear end is downwards, thus preventing the tube from turning. When fitted correctly the gas holes in the tube are visible on both sides above the top edge of the forearm. Push the slide torwards and put the recoil spring body and spring into place. The cover can then be dropped into position and pushed into the dove tail groove at the frontend of the receiver.



Under no circumstances should the cover be pushed sideways or upwards at this stage. Fasten the screw at the rear end of the cover tightly using the hex key.

Please note: Should a large amount of dirt or snow get into the mechanism while in use, a spare hex key for the cover is fitted inside the pistol grip. The black plastic plug can be removed easily using a knife blade, for example.

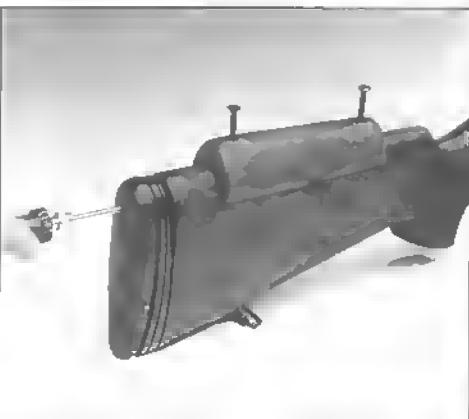


# 10 Stock

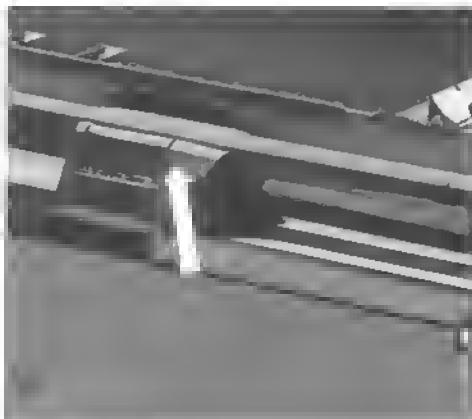
The stock length and butt angle of the rifle can be easily modified by means of handy distance and angle pieces which are available as optional accessories.

The stock is shaped primarily for use with open sights. Since the line of aim when using a scope is obviously higher, the height of the stock may have to be adjusted in order to permit a good shooting position. A detachable cheek piece complete with fitting screws is also available as an optional accessory for the rifle.

All the wooden parts of the rifle are made of high quality walnut which is treated with protective varnish at the factory. An occasional brush over with gun oil or varnish will keep the stock looking good for years to come.



Sako-Valmet weapons are designed, manufactured and tested to international safety standards (including C.I.P.). Incorrectly loaded home-made cartridges are the single biggest danger for the weapon and its user. The manufacturer takes no responsibility for the damage caused by cartridges of this kind. Always use good quality factory-made cartridges.



## Technical data

|                            |   |
|----------------------------|---|
| Type:                      | Semi-automatic rifle  |
| Caliber:                   | .308 Win and .30-06   |
| Overall length:            | 108 cm (42.5")  |
| Weight (without magazine): | 3.7 kg (8.2 lb)   |
| Weight of loaded magazine: | 2-rd magazine 230 g (8.1 oz)<br>5-rd magazine 290 g (10.2 oz)<br>9- rd magazine 440 g (15.5 oz)<br>53.5 cm (21")                    |
| Barrel length:             | 11" (280 mm)  |
| Number of grooves:         | 4   |
| Rate of twist:             | Large caliber 7.82 mm<br>Small caliber 7.62 mm  |
| Caliber dimensions:        | Open sights and attachment truck for scope  |
| Sights:                    | Stock and fore-arm: Walnut  |
| Optional accessories:      | Distance and angle pieces<br>Cheek piece<br>Scope mount<br>Substitute gas plug for lighter bullet weights<br>Decorated Valmet sling |

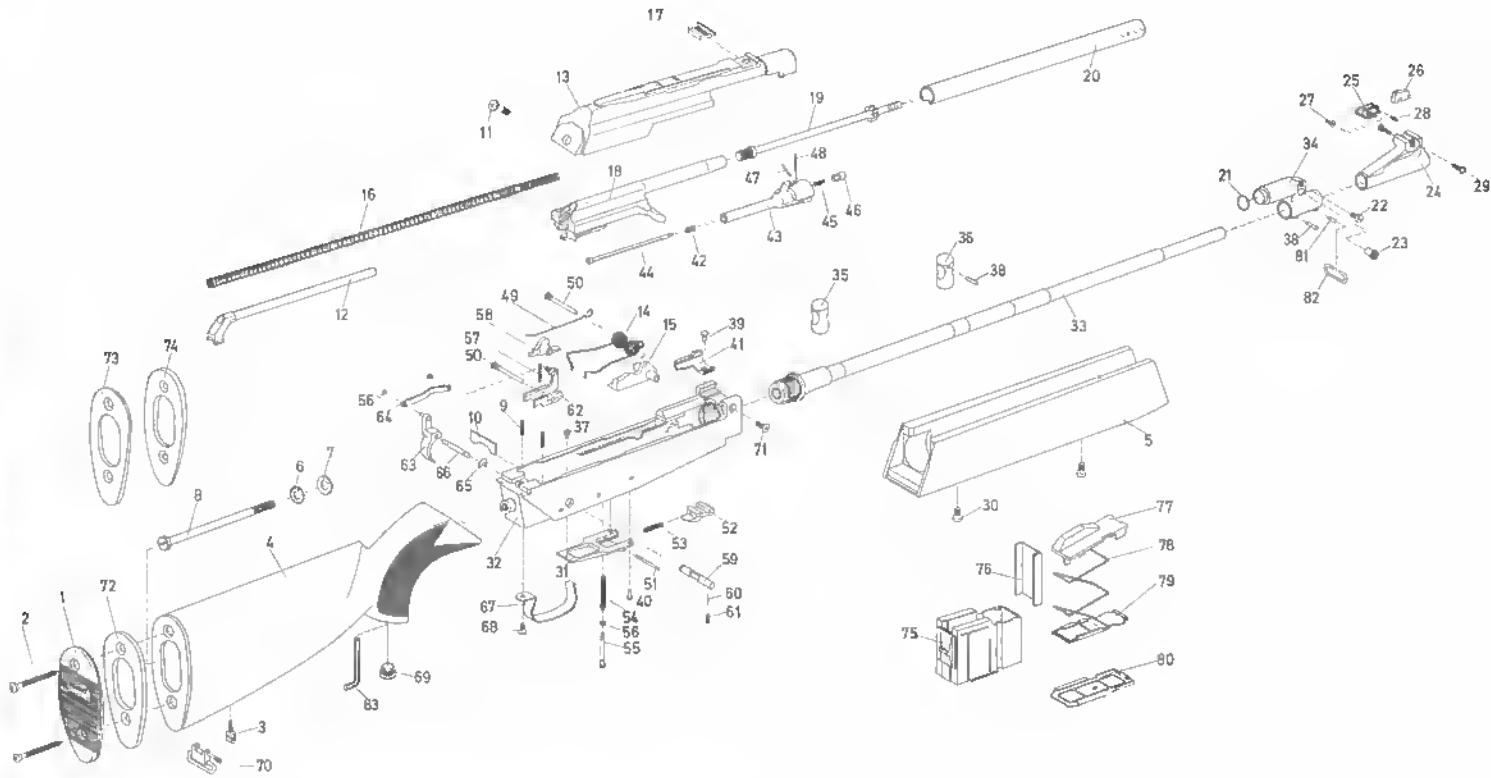
# HUNTER .308 m-88

|    |         |                            |    |        |                            |    |        |                             |
|----|---------|----------------------------|----|--------|----------------------------|----|--------|-----------------------------|
| 1  | 209540M | Butt Plate Lexan 500 black | 36 | 400220 | Support Tube, front        | 71 | 400440 | Hex Screw M5 x 10           |
| 2  | 204425  | Screw 4.8 x 50 2 pcs       | 37 | 218230 | Trigger Stop               | 72 | 209420 | Distance Piece, black       |
| 3  | 208440  | Sling Swivel Base          | 38 | 251040 | Taper Pin 3 x 14 2 pcs     | 73 | 209560 | Angle Piece                 |
| 4  | 400490  | Stock m-88                 | 39 | 252631 | Cam Plate Rivet            | 74 | 209550 | Angle Piece                 |
| 5  | 400500  | Fore-end m-88              | 40 | 253800 | Rivet 4 x 6.5 2 pcs        | 75 | 400360 | Magazine Body Assembly 5-rd |
| 6  | 251100  | Washer                     | 41 | 255651 | Bolt Gam Plate             | 76 | 400410 | Side Plate                  |
| 7  | 252550  | Washer                     | 42 | 219101 | Firing Pin Spring          | 77 | 218520 | Feeding Ramp Assembly       |
| 8  | 218350  | Stock Screw                | 43 | 219660 | Bolt (Carrier Assembly)    | 78 | 219460 | Spring                      |
| 9  | JE9088  | Tension Pin 2.5 x 16 2 pcs | 44 | 219780 | Firing Pin                 | 79 | 219620 | Spring Plate Assembly       |
| 10 | 400430  | Recoil Plate               | 45 | 251690 | Extractor Spring           | 80 | 219500 | Bottom Plate                |
| 11 | 400080  | Cover Screw                | 46 | 400610 | Extractor Pin              | 81 | 400640 | Taper Pin 3 x 6             |
| 12 | 400100  | Recoil Spring Body         | 47 | 256130 | Firing Pin                 | 82 | 400630 | Sling Swivel                |
| 13 | 400110  | Cover, complete            | 48 | 256360 | Firing Pin Retainer Pin    | 83 | 400650 | Hex Screw M4                |
| 14 | 251250  | Hammer Spring              | 49 | 219950 | Pin Retainer Spring        |    |        |                             |
| 15 | 218140  | Hammer                     | 50 | 251230 | Sear Pin 2 pcs             |    |        |                             |
| 16 | 251781  | Recoil Spring              | 51 | 400320 | Catch Pin                  |    |        |                             |
| 17 | 219765  | Sight Plate                | 52 | 400040 | Magazine Catch             |    |        |                             |
| 18 | 400130  | Slide                      | 53 | 400300 | Spring                     |    |        |                             |
| 19 | 400140  | Gas Piston                 | 54 | 400310 | Locking Button Spring      |    |        |                             |
| 20 | 400150  | Gas Tube                   | 55 | 400230 | Locking Button             |    |        |                             |
| 21 | 400570  | O-Ring 15 x 2              | 56 | KG6506 | (Retaining) Ring 2.3 3 pcs |    |        |                             |
| 22 | 219450  | Locking Screw              | 57 | 251220 | Sear Spring                |    |        |                             |
| 23 | 400600  | Gas Plug                   | 58 | 215610 | Disconnecter               | 19 | 400730 | Gas Piston                  |
| 24 | 400030  | Front Sight Base           | 59 | 400240 | Safety Button              | 32 | 400180 | Receiver                    |
| 25 | 400260  | Front Sight Plate          | 60 | A00002 | Steel Ball Ø3              | 33 | 400190 | Barrel                      |
| 26 | 400250  | Front Sight                | 61 | 201101 | Spring                     | 34 | 400720 | Gas Block                   |
| 27 | 400450  | Screw M3 x 6               | 62 | 218260 | Sear, complete             | 75 | 400590 | Magazine Body Assembly 5-rd |
| 28 | JE9005  | Tension Pin 2 x 8          | 63 | 218290 | Trigger, complete          | 76 | —      | —                           |
| 29 | 400460  | Screw M4 x 12 2 pcs        | 64 | 218310 | Trigger Bar                | 77 | 219610 | Feeding Ramp Assembly       |
| 30 | 219810  | Screw 2 pcs                | 65 | KG6508 | (Retaining) Ring 4         |    |        |                             |
| 31 | 400050  | Catch Body                 | 66 | 218330 | Trigger Pin                |    |        |                             |
| 32 | 400180  | Receiver                   | 67 | 400020 | Trigger Guard              |    |        |                             |
| 33 | 400190  | Barrel                     | 68 | 218250 | Trigger Guard Screw        |    |        |                             |
| 34 | 400200  | Gas Block                  | 69 | 400470 | Plastic Plug               |    |        |                             |
| 35 | 400210  | Support Tube, rear         | 70 | 208430 | Sling Swivel Tikka         |    |        |                             |

# HUNTER .30-06 m-88

Similar to .308, except

|    |        |                             |
|----|--------|-----------------------------|
| 19 | 400730 | Gas Piston                  |
| 32 | 400180 | Receiver                    |
| 33 | 400190 | Barrel                      |
| 34 | 400720 | Gas Block                   |
| 75 | 400590 | Magazine Body Assembly 5-rd |
| 76 | —      | —                           |
| 77 | 219610 | Feeding Ramp Assembly       |





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